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Turelli, Michael, and H. Allen Orr, Dominance, epistasis and the genetics of postzygotic isolation 1663–1679

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Utz, H. Friedrich, Albrecht E. Melchinger and Chris C. Schön, Bias and sampling error of the estimated proportion of genotypic variance explained by quantitative trait loci determined from experimental data in maize using cross validation and validation with independent samples 1839–1849

Valencia-Morales, Edgar, and David Romero, Recombination enhancement by replication (RER) in *Rhizobium etli* 971–983

Vernì, Fiammetta, Renu Gandhi, Michael L. Goldberg and Maurizio Gatti, Genetic and molecular analysis of *wings apart-like* (*wapl*), a gene controlling heterochromatin organization in *Drosophila melanogaster* 1693–1710

Vieira, Cristina, Elena G. Pasyukova, Zhao-Bang Zeng, J., Brant Hackett, Richard F. Lyman and Trudy F. C. Mackay, Genotype-environment interaction for quantitative trait loci affecting life span in *Drosophila melanogaster* 213–227

Waddington, David, Anthea J. Springbett and David W. Burt, A chromosome-based model for estimating the number of conserved segments between pairs of species from comparative genetic maps 323–332

Waggoner, Laura E., Laura Ann Hardaker, Steven Golik and William R. Schafer, Effect of a neuropeptide gene on behavioral states in *Caenorhabditis elegans* egg-laying 1181–1192

Wagner, Andreas, The role of population size, pleiotropy and fitness effects of mutations in the evolution of overlapping gene functions 1389–1401

Wall, Jeffrey D., Detecting ancient admixture in humans using sequence polymorphism data 1271–1279

Wang, Jinliang, and William G. Hill, Marker-assisted selection to increase effective population size by reducing Mendelian segregation variance 475–489

WANG, LAN, CHARLES E. OGBURN, CAROL B. WARE, WARREN C. LADIGES, HAGOP YOUSSOUFIAN, GEORGE M. MARTIN AND JUNKO OSHIMA, Cellular Werner phenotypes in mice expressing a putative dominant-negative human *WRN* gene 357–362

WELLER, JOEL IRA, Using the false discovery rate approach in the genetic dissection of complex traits: A response to Zaykin *et al.* 1919

WICKERT, STEVE, AND EQUARDO ORIAS, Tetrahymena micronuclear genome mapping: A high-resolution meiotic map of chromosome 1L 1141–1153

WICKERT, STEVE, LESLIE NANGLE, STEVE SHEVEL AND EDUARDO ORIAS, Tetrahymena macronuclear genome mapping: Colinearity of macronuclear coassortment groups and the micronuclear map of chromosome 1L 1155–1167

WOLKOW, TOM D., PETER M. MIRABITO, SRINIVAS VENKATRAM AND JOHN E. HAMER, Hypomorphic $bimA^{APC3}$ alleles cause errors in chromosome metabolism that activate the DNA damage checkpoint blocking cytokinesis in *Aspergillus nidulas* 167–179

WOOLLIAMS, JOHN A., AND PITER BIJMA, Predicting rates of inbreeding in populations undergoing selection 1851–1864

YAMAMOTO, TOSHIO, HONGXUAN LIN, TAKUJI SASAKI AND MASAHIRO YANO, Identification of heading date quantitative trait locus *Hd6* and characterization of its epistatic interactions with *Hd2* in rice using advanced backcross progeny 885–891

YANG, MING YAO, ZONGSHENG WANG, MATTHEW MACPHERSON, JULIAN A. T. DOW AND KIM KAISER, A novel Drosophila alkaline phosphatase specific to the ellipsoid body of the adult brain and the lower Malpighian (renal) tubule 285–297

YOUNG, ELTON, T., JAMES S. SLOAN AND KRISTEN VAN RIPER, Trinucleotide repeats are clustered in regulatory genes in *Saccharomyces cerevisiae* 1053–1068

ZAYKIN, DMITRI V., S. STANLEY YOUNG AND PETER H. WESTFALL, Using the false discovery rate approach in the genetic dissection of complex traits: A response to Weller *et al.* 1917–1918

ZENG, ZHAO-BANG, JIANJUN LIU, LYNN F. STAM, CHEN-HUNG KAO, JOHN M. MERCER AND CATHY C. LAURIE, Genetic architecture of a morphological shape difference between two Drosophila species 299–310

ZIMMERMAN, JOHN E., QUANG T. BUI, HAIXI LIU AND NANCY M. BONINI, Molecular genetic analysis of Drosophila *eyes absent* mutants reveals an eye enhancer element 237–246